DATE: December 5, 2013

TO: Metropolitan King County Councilmembers

FROM: Kymber Waltmunson, King County Auditor

SUBJECT: Follow-up on 2012 Performance Audit of King County's Investment in Information Technology

The two agencies addressed in our 2012 audit, King County's Department of Information Technology (KCIT) and the Office of Performance, Strategy and Budget (PSB) have made steady progress implementing the 13 audit recommendations. They have completed implementation of five recommendations and made progress in implementing seven recommendations. One recommendation remains unresolved at this time. Both agencies have a number of initiatives underway to apply additional analytic rigor to more effectively link IT initiatives with strategic objectives and increase transparency on the costs and benefits of current or planned IT projects.

Additional actions are needed, however, to fully implement eight of the remaining recommendations. Areas requiring additional actions include fully developing the strategic investment framework for IT project decision-making, consistently demonstrating more substantive benefit realization plans, and calculating the cost of countywide IT and benchmarking it to peer agencies, among other actions.

Progress on implementing the 13 audit recommendations fell into four categories:

1. **A framework to ensure strategic and transparent IT investment governance and independent oversight. (Recommendations 1, 2, and 3)**

   KCIT has made significant progress in maturing the strategic investment framework for selecting and evaluating IT projects. It has incorporated strategic business alignment elements for individual projects during conceptual review, as well as aligning total IT investments with King County's strategic goals and objectives. Reviewing how these and other processes are used on IT projects throughout 2014, as well as IT project funding decisions for the 2015 budget, will provide further evidence of the effectiveness of actions to date to improve the IT strategic investment framework.

2. **Rigorous, complete, and transparent processes for IT project selection. (Recommendations 4 and 5)**

   PSB is evaluating and scoring potential IT projects at conceptual review and developed a criteria and scoring system to rank and prioritize projects. Additionally, it plans to make summary evaluation information available for all projects in 2014. The Innotas Portfolio Management System has improved the availability and transparency of information on projects. Further improvements are planned in 2014 to consolidate individual IT project information into a single business case.

3. **Effective systems to collect and analyze project information with a strong focus on ensuring realization of project benefits. (Recommendations 6, 7, 8, 9, 10, and 11)**

   PSB has made progress improving how IT project benefits are estimated and tracked through revisions to its cost benefit analysis template. It has more clearly defined the types of benefits that can result from IT projects and encouraged business owners to apply more rigor to benefit realization plans. In 2013, the County Executive transmitted to the County Council its Benefits Realization Strategy for Information Technology Projects. This strategy included specific steps that IT projects will undertake to identify, monitor, track, and report on benefits. Additionally, in 2014, PSB will begin providing an annual report to the County Council on the benefits achieved from IT projects. Since these processes are relatively new or were put into place prior to the 2014 budget process, more time is needed to demonstrate they are working effectively.

   KCIT's Innotas IT Portfolio Management System includes an IT project database with a variety of reporting mechanisms such as customized dashboards to track or monitor current or historical IT project data. The Innotas system also provides metrics on percentage changes in IT project cost, benefits, and schedule that could trigger a revaluation of a project, consistent with Project Review Board's (PRB) risk-based approach for project oversight.

   Finally, KCIT is developing a lessons learned database and changing its project management methodology to put more emphasis on the knowledge and processes contributing to IT project success.

4. **Reporting on the total cost of IT in King County including benchmarking such costs to other local governments. (Recommendations 12 and 13)**

   In 2014, KCIT and PSB plan to develop the total cost of IT broken out by operational, project, and debt service costs, although including such costs from the offices of the separately elected officials may not be readily available. Should such data not be available, KCIT and PSB should indicate the source of any organizational limitations hindering

development of total IT spending countywide. While KCIT has benchmarked some IT costs to private vendors, the full countywide IT costs are needed to provide a more comprehensive comparison.

In summary, KCIT and PSB have made progress addressing 12 of the 13 recommendations to improve governance, strategic planning, IT cost and benefit reporting, and identifying the total cost of IT. In order to evaluate the success of the pending action items, we anticipate conducting further audit follow up in fall 2014.

If you have any questions regarding this follow-up letter or the implementation status of any of the audit recommendations, please contact Ben Thompson, Deputy County Auditor, at 206-477-1035 or me at 206-477-1043.

Attachment A - Implementation Status

cc: Dow Constantine, King County Executive
        Fred Jarrett, Deputy County Executive
        Rhonda Berry, Assistant Deputy County Executive
        Dwight Dively, Director, Office of Performance, Strategy and Budget
        Carol Basile, Deputy Director, Department of Executive Services, Finance & Business
            Operations Division
        Bill Kehoe, County Chief Information Officer, King County Information Technology

Performance Audit of King County's Investment in Information Technology: 2013 Follow-Up Attachment A: Implementation Status

Summary of Findings

Of the audit recommendations:

DONE	have been fully implemented
PROGRESS	are in progress or partially implemented
OPEN	remain unresolved

Note: some items noted as "Done" have had the fundamental components implemented, but require ongoing actions and practices to remain so; the status detail for each recommendation explains further.

#	Quick Status	Recommendation	Status Detail
1	**PROGRESS**	The Office of Performance, Strategy and Budget (PSB), in consultation with King County Information Technology (KCIT), should further mature the strategic investment framework for formal approval by stakeholders, including the King County Council. PSB and KCIT should then clearly communicate and apply the framework. The strategic investment framework should include: a) Roles and responsibilities for guiding resource allocation and ensuring intended results and modified business processes. b) Definition and communication of investment types, categories, criteria and relative weightings to the criteria to document value decisions among projects. c) Clear requirements for stage completion and other reviews. d) Definition of a balanced set of project and portfolio performance objectives, metrics, targets, and benchmarks. e) Alignment with the countywide strategic plan and its goals for delivering value.	Overall KCIT and PSB have made significant progress in maturing the strategic investment framework for selecting and evaluating IT projects. For example, it has incorporated strategic business alignment elements for individual projects during conceptual review as well as aligning total IT investments with King County's strategic goals and objectives. Additionally, KCIT and other stakeholders can use the new Innotas Portfolio Management Tool to create reports and dashboards assessing how the IT portfolio meets intended results and conforms to business processes. Reviewing how these and other processes are used on projects throughout 2014 as well as IT project funding decisions for the 2015 budget will provide further evidence of the effectiveness of actions to date to improve the IT strategic investment framework.

#	Quick Status	Recommendation	Status Detail
2	DONE	KCIT should increase and document Strategic Advisory Committee, Business Management Council, and Technology Management Board focus on shaping and confirming compliance with King County's technology strategies and objectives in general and for the full technology portfolio as is required by code.	Meeting minutes and actions by the Strategic Advisory Committee, Business Management Council, and Technology Management Board reflect greater focus and linkage to King County IT strategic objectives and more emphasis on reviewing the technology portfolio.
3	PROGRESS	KCIT, in its role on the Project Review Board (PRB), should: a) Develop and implement a methodology for ensuring independent oversight of KCIT-led projects; and b) Develop and implement a plan to increase stakeholder involvement and PRB transparency.	KCIT has consultants providing quality assurance on high cost KCIT-led IT projects and has taken several steps to include broader stakeholder involvement with PRB activities. The oversight consultant does not report to the project, but rather to the Chief Information Officer, in his role as PRB chair. Following the progress of consultant oversight on two high cost IT projects during 2014 will provide evidence for evaluating the successful implementation of this recommendation.
4	DONE	PSB should utilize a set of consistent and transparent criteria and a scoring system to evaluate potential projects at conceptual review. This criteria and scoring system should be linked to the strategic investment framework. Additionally, PSB should employ a system to score, rank, and prioritize projects within a funding category for inclusion in the budget.	In 2013 PSB began to evaluate and score potential projects at conceptual review. They have developed a set of criteria and scoring system to rank and prioritize projects. They plan to produce summary information about these evaluations in 2014.
5	PROGRESS	PSB should ensure that business cases are complete, clear, and contain the most accurate data available at the time of submittal. Business cases should clearly state the level of confidence in the information presented and include a timeframe estimate when more complete information will be available as the project matures. In addition, PSB should ensure rigorous completion of the five elements of business cases noted above including ensuring that departments fully state and explain the assumptions used in the business cases.	PSB has made improvements to its business case template and the introduction of the Innotas system has improved the availability and transparency of information on projects. PSB plans on making further improvements to consolidate the information on individual projects into a single business case document in 2014.

#	Quick Status	Recommendation	Status Detail
6	DONE	PSB should update its template to correct the net present value calculation, correct missing formulas, consistently account for inflation, and account for full project lifecycle in time for the 2013 conceptual review sessions. In addition, prior to submitting to County Council, PSB should ensure that the cost/benefit worksheet includes the most accurate data available at the time of submittal, including clear communication of the level of confidence in the information presented and an estimate of the timeframe when information would become more precise.	PSB has corrected errors in its cost benefit analysis template and conducts training for users completing this template. While our recommendation stated that the level of confidence should be clearly indicated, the current template does not do so. PSB staff explained that the level of contingency funding requested for each project and stated in the template indicates the level of confidence in the cost estimate.
7	DONE	PSB in consultation with KCIT should develop a process to reevaluate information technology projects if project costs, benefits, or schedules change beyond estimated percentages. This process should include a reporting schedule for reporting to the County Council.	The risk-based approach being implemented for project oversight by the PRB sets percentage thresholds for changes in cost, benefits, and schedule that could trigger a revaluation of a project. These metrics are available and reported through the Innotas system, thus are available to County Council.
8	PROGRESS	PSB should develop definitions to distinguish between the various types of savings from IT projects and consistently use these definitions in reports to the County Council and other decision-makers. PSB should provide instructions and examples to illustrate the differences between these savings definitions which departments can use when completing the cost/benefit analysis template.	PSB staff have made progress in more clearly defining the types of benefits that can result from IT projects and has encouraged business owners to think more clearly about benefits. It has conducted some training in this area and more training for business owners and project managers is planned for 2014. Additionally, PSB will release its report on IT project benefits in the spring of 2014.
9	DONE	KCIT should, to the extent possible, ensure that both current and historical project data is accurate and easily accessible. It should be in a format that allows for analysis both within and among projects.	KCIT's Innotas system includes an IT project database with a variety of reporting mechanisms such as customized dashboards to track or monitor current or historical IT project data. The database includes the capability to conduct analysis both within and among IT projects.

#	Quick Status	Recommendation	Status Detail
10	PROGRESS	PSB should develop and ensure compliance with a robust set of benefits realization processes that includes effective planning, accurate estimates, and accountability for realizing, evaluating, and reporting IT project benefits. If necessary, this should include a mechanism to make budget adjustments, when applicable, based on expected savings.	As noted above, PSB has made progress improving how benefits from IT projects are estimated and tracked. Given that benefits generally occur at or near the completion of projects, it is too early to tell whether this effort fulfills this recommendation.
11	PROGRESS	PSB and KCIT should develop and implement a plan to ensure that lessons learned are captured and consulted at key points in the project lifecycle.	In October 2013, KCIT contracted with a vendor to change the county-wide IT project management methodology from a deliverable based system to one which emphasizes the knowledge and processes needed for successful IT project implementation. This methodology will be launched in the first quarter of 2014, and will form the basis for future project lessons learned analysis. At that time, KCIT will evaluate the use of SharePoint as the repository and structure for the lessons learned database.
12	OPEN	KCIT and PSB, working with all county offices and agencies including those of separately elected officials, should annually collect and report information on the total cost of IT.	KCIT and PSB have agreed to work together in 2014 to develop the total cost of countywide IT broken out by operational, project, and debt service costs for the executive branch of King County. They note that comparable IT cost information from the offices of the separately elected may not be readily available. We encourage KCIT and PSB to gather as much countywide IT cost information as is readily available and indicate the source of any organizational limitations hindering development of total IT spending countywide.
13	PROGRESS	KCIT should use the newly developed countywide cost of IT to benchmark IT spending to relevant local government peers. This information should be presented annually to the County Council.	KCIT has benchmarked the cost of cloud computing to private vendors but this is a limited benchmark comparison. We will again review the status of this recommendation when the total cost of IT in King County is available in 2014.